

REMARKS--General

Regarding rejections over 102: In this instant application, the bolt, described as mechanical fastener (20), serves the double duty of fastening the lead (18) so that it makes a strong contact with a metal contact (22) and at the same time fastening that metal contact (22) to the body (12). There is no reference or indication that the mechanical fastener (20) is used for maintaining a pressure to insure proper mechanical contact of the probes to the surface to be measured. The function of applying a strong mechanical contact between a probe and a surface to be measured is insured by the bar clamp (36) which is a mechanical structure vastly different from the combination supporting member (12) and elongated screw (38) of the 807 patent and as such the two structures cannot be construed as mechanical equivalents. A bar clamp achieves its result in a different way and is also capable of achieving results not obtainable by the 807 patent as will be explained later.

Applicant agrees that the 807 patent does have a lead passageway for passing a lead therethrough, this of course being a feature found on many types of electrical devices having wires. This instant application offers the advantage of using the same mechanical fasteners used for attaching the lead and attaching a pad. This is because the lead is attached at the location of the probe whereas the 807 patent has the lead attached to a location somewhat remote from the probe, at the opposite end of the probe, indicated as part (24). Again, substantial differences in structure exist not just in esthetic or practical choices but in functionality as well, further explanations follow.

Regarding rejections over 103: The probes in this instant application are large and strong because they are specifically designed for measuring large currents on large devices and do not require the same components in the same sequence and arrangement stated in the 807 patent, which appears to be directed at measuring small and delicate components as those found on printed circuit boards. Because each invention was created for measuring certain specific types of components, they had to be designed differently. Both inventions are not substantially similar so as to operate in a substantially similar fashion so as to give a substantially similar result. In the 807 patent, having point contacts is sufficient for the application at hand and there were no motivations for the inventors to create various shapes to fit a variety of differently shaped components to be measured. Measuring high voltage requires for the mechanical contacts to be strong and cover a good surface area of the part so as to reduce or even eliminate the risk of arcing, that is creating sparks due to the current jumping to reach other parts of the components. Moreover, the probes of this instant invention are easily dismountable so that a variety of pads can be readily fitted and, because the same bolts are used for tightening the leads, one can be assured that the mechanical connection is still good. Indeed, if the changing of the probes is separate and distinct from the changing of the lead, a user can, over time, neglect to verify the integrity of the mechanical connection of the lead to the probe. This unique feature cannot be reversed engineered into the 807 patent, or even the 3,840,808 patent by Liebermann for that matter.

This instant invention responds adequately to a long felt need in the field of high voltages and high amperages which, to date, has not been filled. Had the invention been so obvious, surely it would have been invented by now and Examiner has not

been able to find a reference that can accomplish what this instant invention can do. For example, rescaling the 807 patent so that it can fit on large components would produce a product that would have serious problems with arcing because of the way parts (46) which present long segments of conductive material proximal to the surface being tested. The Liebermann patent would also present a clamp which would not configure very well to components and would have arcing problems. Because of this important design difference, this instant invention fulfills a need that the others cannot without requiring unsuggested changes that are not so obvious without the benefit of 20/20 hindsight.

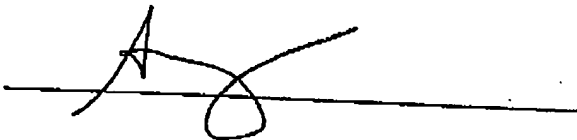
It is believed that the claims as previously submitted sufficiently distinguish over the prior art given that they are to be construed from information given in the specification which by itself narrows the scope of the claims. Furthermore, claim 1 already has the limitation of having an attachment groove situated on one of the four faces whereas the clamp of the 807 patent has an attachment groove for receiving screw (38) situated on three faces as a further indication of the distinct structural nature of the inventions. Structural differences necessary because of the different applications for which both the 807 patent and this invention are directed at.

Applicant hopes that he has responded to the Office Action in an appropriate manner.

Requests for constructive assistance

The undersigned has made a diligent effort to amend the claims of this application so that they define unobvious structure because it produces new and unexpected results. If for any reasons the claims of this application are not believed to be in full condition for allowance, applicant respectfully requests the constructive assistance and suggestions of the Examiner in drafting one or more claims pursuant to MPEP 707.07(j) or in making constructive suggestions pursuant to MPEP 706.03(d) in order that this application can be placed in allowable condition as soon as possible and without the need for further proceedings.

Very Respectfully,

A handwritten signature in black ink, consisting of a stylized 'A' followed by a horizontal line and a large loop, is written over a horizontal line.